

Claims

1. A labware device comprising:
  - a substrate having a planar surface that acts as a focal plane at which localized optically detectable targets are located; and
  - a fluorescent labeling material layer joined onto said substrate in defined spatial relation to said planar surface, said labeling material layer including an identification indicia pattern, wherein said optically detectable targets and identification indicia pattern have overlapping excitation and emission wavelengths.
2. The device of claim 1, wherein said substrate is a slide.
3. The device of claim 1, wherein said substrate is a microfluidic device.
4. The device of claim 1, wherein said substrate is a multiwell plate.
5. The device of claim 1 further comprising a backing material layer such that said fluorescent labeling material is located between said backing material layer and said substrate.
6. The device of claim 1 further comprising a backing material layer such that said backing material layer is located between said fluorescent labeling material layer and said substrate.

7. The device of claim 1, wherein said identification indicia pattern includes a human interpretable mark.

8. The device of claim 1, wherein said identification indicia pattern includes at least two different fluorescent dyes located at different locations on said indicia pattern.

9. The device of claim 8, wherein each of said at least two different fluorescent dyes has a different illumination wavelength.

10. The device of claim 1, wherein said identification indicia pattern is a bar code.

11. The device of claim 10, wherein said bar code is a quantification bar code.

12. The device of claim 10, wherein said bar code includes a sizing standard.

13. A method of optical analysis of a substrate comprising:

illuminating using an optical system a planar surface of a substrate at a identifying indicia location;

focusing said optical system on a focal plane of said planar surface by using said identifying indicia as a focus target;

optically analyzing discrete samples on said target plane, wherein a resulting image includes both target sample data and identifying indicia data as part of an image; and

storing said resulting image in a memory.

14. The method of claim 13, further including changing an emission filter and repeating steps c and d for that filter.

15. The method of claim 13 further including providing on said identifying indicia a quantifying standard, generating a quantifying graph by analyzing said quantifying standard and analyzing collected data using said graph.

16. The method of claim 13 further including providing on said identifying indicia a sizing standard and analyzing collected data using said sizing standard.

17. An adhesive label for labware including:  
a reflective bar code; and  
a fluorescent bar code.

18. The adhesive label of claim 17, further including alpha numeric characters.

19. The adhesive label of claim 17, wherein said label is made from a clear polymer.

20. The adhesive label of claim 17, wherein the fluorescent bar code produces fluorescence in a plurality of detection channels.

21. The adhesive label of claim 17, further including a plurality of additional reflective bar code labels with identical codes as the adhesive label of claim 17.